Correspondence

The Editors will be pleased to receive and consider for publication correspondence containing information of interest to physicians or commenting on issues of the day. Letters ordinarily should not exceed 600 words and must be typewritten, double-spaced, and submitted in duplicate (the original typescript and one copy). Authors will be given the opportunity to review the editing of their correspondence before publication.

Hypocholesterolemia and Malabsorption in HIV Infection

To THE EDITOR: Hypocholesterolemia has been noted to occur in the acquired immunodeficiency syndrome (AIDS) and has been associated with the malnutrition and cachexia often seen in end-stage AIDS.[1,2] There is, however, a paucity of published data quantifying serum cholesterol levels in AIDS and almost no data on when in the course of human immunodeficiency virus (HIV) infection hypocholesterolemia occurs.

We retrospectively reviewed the charts of 68 HIV-infected patients, including 64 men and 4 women. Of these patients, 22 had more than 500 per μl T4-helper cells, 16 had 200 to 500 per μl, and 30 had less than 200 per μl T-helper cells. We compared serum cholesterol levels in these patients with published mean cholesterol levels in the American population, adjusted for age and sex.[3]

Hypocholesterolemia was common in all three patient groups. In patients with less than 200 per μl T-helper cells, 90% (27 of 30) had cholesterol levels (mean, 140 ± 71 mg per dl) in the lowest 25% of the US population with 73% (22 of 30) having cholesterol levels (mean, 134 ± 65 mg per dl) among the lowest 10% of the US population. Patients with 200 to 500 per μl T-helper cells had only slightly higher cholesterol levels, with 75% (12 of 16) having levels (mean, 143 ± 30 mg per dl) among the lowest 25%, and 56% (9 of 16) with cholesterol levels (mean, 135 ± 24 mg per dl) in the lowest 10% of the US population.

Surprisingly, patients with more than 500 per μl T-helper cells also had cholesterol levels much lower than the national means. In this group, 81% (18 of 22) were noted to have cholesterol levels (mean, 146 ± 76 mg per dl) in the lowest 25% of the US population, with 59% (mean, 131 ± 61 mg per dl) falling into the lowest 10% of the American population.[3] Aspartate aminotransferase levels were measured in 12 of the 18 patients with the lowest cholesterol levels in this group of patients, with 10 of 12 patients having values within the normal range (11 to 32 U per liter) and 2 patients having mild elevations only (49 and 56 U per liter, respectively). Serum albumin levels were within the normal range in all 12 of these patients.

Our data suggest that hypocholesterolemia is a common feature of HIV infection throughout the range of disease. Hypocholesterolemia is frequently associated with malnutrition, malabsorption, or hepatic dysfunction. Hepatic dysfunction appeared to be rare in our patients with early HIV infections (T-helper cells > 500 per μl). Inadequate diet and malabsorption have been frequently noted previously in AIDS patients.[4,5] The frequency of hypocholesterolemia observed here suggests that they may occur in early HIV infection. Caution is needed in this interpretation, for our data are largely confined to adult male patients in a limited geographic area and may not reflect HIV infection in children, women, or patients in other parts of the United States or the world. Moreover, cholesterol levels are a relatively nonspecific indicator of malabsorption and malnutrition; the normal albumin values at least raise the question of whether another mechanism is responsible for the hypocholesterolemia. Nevertheless, we think that further study of the prevalence and significance of hypocholesterolemia, and possibly of malabsorption, in early asymptomatic HIV infection is warranted.

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The International Medical Corps

To THE EDITOR: I would like to inform your readers about the service opportunities that exist with the International Medical Corps.

In early 1984, I read about the destruction of Afghanistan's health care system caused by the 1979 Soviet invasion and subsequent occupation. Most of the country's 1,500 physicians had been executed, imprisoned, or driven into exile. All humanitarian relief organizations had been ordered out of the country. Land mines were crippling and maiming thousands of civilians, and once-controlled diseases had reappeared. In May 1984, I went to Afghanistan and established the first American-supported medical surgical unit. I realized, however, that emergency assistance was not enough. If medical care were to have a lasting effect, the training of new medical personnel was essential. This led to the idea of an international medical corps that would train local health workers to care for their own people and to develop a sustainable and lasting health care system.

Founded by US physicians and nurses in 1984, the International Medical Corps (IMC) was established to provide health care through training to countries in crises whose health care systems have been destroyed. Since that time, the IMC's achievements in Afghanistan have included the building and supply of 59 clinics and hospitals in 24 provinces throughout rural Afghanistan. Over 200 medics have graduated from our medic training program based in Peshawar,

Pakistan. This past year, new training initiatives began. The IMC started an eight-month program to upgrade the clinical skills of Afghan physicians, began a four-month program to train Afghans as field microscopists, and conducted a formalized retraining program for previously trained medics. Gradually, Afghanistan's shattered health care system is being rebuilt.

In addition, the IMC has expanded its services to other regions of the world. In Honduras, health care services were provided to more than 130,000 Nicaraguans displaced by civil war. In southeast Angola, the IMC is conducting an immunization program to inoculate 60,000 children and women of childbearing age and to train local personnel. This program also includes emergency food, agricultural assistance, and nutritional and water assessments. Future health care and training projects are planned for other African countries, Central America, and for Cambodia and Kurdistan.

The IMC is the compilation of its medical personnel, many of whom volunteer to work under difficult conditions. Many challenging opportunities exist in the international health care field. I invite you to join our corps and train people to help themselves.

For further information on IMC programs, your readers can call the Recruitment Department at (213) 670-0800. Travel expenses, room, board, medical insurance, and a monthly stipend are provided.

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Preventing the Contact Dermatitis Caused by a Transdermal Clonidine Patch

To THE EDITOR: The centrally acting antihypertensive agent, clonidine, is now available in a transdermal treatment form and has been shown to be highly effective in the control of hypertension.[1-3]

This "Catapres-Transdermal Therapeutic System" (Boehringer Ingelheim, Ltd) is a multilayered skin patch in three sizes that continuously delivers either 0.1, 0.2, or 0.3 mg of clonidine systemically and daily for seven days before being replaced. With its use, patient compliance is greatly enhanced and the "steady state" of drug delivery decreases the incidence of adverse side effects, except for one troublesome problem—an erythematous, pruritic rash beneath the patch in about 12% to 20% of patients.[2,3] The rash may occur with treatment with all three patch sizes and is more common in white patients. It frequently causes patients to discontinue the use of transdermal therapy.

My several attempts to prevent this rash—more frequent changes of the patch or the use of steroid creams around the patch—all resulted in failure. Three years ago I began pretreating the skin application site with an aerosolized spray medication containing beclomethasone dipropionate. The results have been gratifying.

This anti-inflammatory agent is marketed as Vancenase Nasal Inhaler (Schering) and is contained within an aerosol canister with a propellant that dries instantly on contact with the skin, thereby creating ideal conditions for clonidine patch application. The original Vancenase is used, not the aqueous preparation.

In this pretreatment, the skin application site is first cleansed with an alcohol pledget and allowed to dry. The center of the site is marked and "bracketed" with four metered doses at close range of the aerosolized beclomethasone. The patch is then applied in the usual fashion to this prepared area.

In three years, I have encountered 15 patients with a "patch rash" and have treated all of them in this manner. In 12 patients, the rash has been prevented as long as they continued this pretreatment before applying a clonidine patch. When they failed to do so, the rash promptly reappeared, only to disappear when the beclomethasone spray was again used. In the 3 patients who did not respond to this pretreatment, the patches were discontinued, and oral agents were employed.

The 12 patients who did respond favorably have now been observed every 4 to 12 weeks for an average of 15 months without any reappearance of the contact dermatitis.

The good control of the hypertension in these 12 patients has not deteriorated with this treatment. No significant changes in their therapeutic regimens have been made during this follow-up period. This would indicate that the beclomethasone spray does not diminish the absorption or action of the clonidine applied to the skin surface.

Clinicians and patients alike have applauded the use of the transdermal clonidine patch. It is regrettable that contact dermatitis sometimes mars its performance. The pretreatment procedure described may allow us to continue this effective treatment in many of our hypertensive patients.

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Possible Complications of Acupuncture

To THE EDITOR: I read with great interest the report by Wright and colleagues in the January 1991 issue on bilateral tension pneumothoraces resulting from acupuncture.[1] Eight years ago I saw a similar case of bilateral tension pneumothorax in a nonasthmatic patient that was initially mistaken for an anaphylactic reaction.

Report of a Case

The patient, an elderly Chinese man, was brought to the emergency department by ambulance in severe respiratory distress. He was brought from an acupuncture office where he had just received treatment by acupuncture for unilateral shoulder pain. His skin was covered with oil of wintergreen.

On arrival, he had tachypnea, was unable to speak, and he had hypotension with a systolic blood pressure of 80 mm of mercury and sinus tachycardia. He was diaphoretic with marked use of the accessory muscles of respiration. Auscultation of the chest revealed faint inspiratory and expiratory wheezing symmetrically. The trachea was midline. The patient was promptly intubated and was administered intrave-